

CLAIMS

What is claimed is:

1. An apparatus to control static electricity in an ink-jet printer, comprising:
 - a print head;
 - a paper-feeding portion from which paper is fed;
 - a feeding roller to convey the paper being fed from the paper-feeding portion to the print head;
 - a pinch roller to rotate in contact with the feeding roller, the pinch roller having a shaft;
 - a holder, the shaft of the pinch roller being rotatably supported on the holder;
 - a frame made of a metallic material, to support the holder; and
 - a ground member to ground the pinch roller to the frame, to control the static electricity occurring in the paper passing between the feeding roller and the pinch roller.
2. The apparatus to control static electricity of claim 1, wherein the ground member is connected to the shaft of the pinch roller and the frame.
3. The apparatus to control static electricity of claim 1, wherein the ground member is a metallic wire that has a first end connected to the shaft of the pinch roller and a second end connected to the frame.
4. The apparatus to control static electricity of claim 1, wherein the ground member is a torsion spring that is disposed around the frame and has a first end elastically contacting the pinch roller and a second end elastically contacting the frame.
5. The apparatus to control static electricity of claim 1, wherein the pinch roller is a

molded portion including a conductive synthetic resin.

6. An apparatus, comprising:

first and second rollers to rotate in contact with each other to convey a printing medium;

a frame made of a metallic material, to support the rollers; and

a ground member to ground the second roller to the frame, to control static electricity

occurring in the paper passing between the first and second rollers.

7. The apparatus of claim 6, further comprising:

a print head to print an image on the printing medium;

a feeding portion, the first and second rollers feeding the printing medium from the feeding portion to the print head.

8. The apparatus of claim 6, wherein the ground member comprises a metallic wire, the metallic wire having a first end in contact with the second roller, and a second end in contact with the frame.

9. The apparatus of claim 8, further comprising a plurality of the ground members.

10. The apparatus of claim 8, wherein the ground member is a torsion spring.

11. A printer comprising:

a print head to print an image on a printing medium; and

first and second rollers to rotate in contact with each other to convey the printing medium to the print head, static electricity being generated in the printing medium when passing between the first and second rollers,

the static electricity being removed from the printing medium before being conveyed to the print head.